



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20565-0001

METROPOLITAN EDISON COMPANY

JERSEY CENTRAL POWER & LIGHT COMPANY

PENNSYLVANIA ELECTRIC COMPANY

GPU NUCLEAR CORPORATION

DOCKET NO. 50-289

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 182  
License No. DPR-50

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The applications for amendment by GPU Nuclear Corporation, et al. (the licensee), dated May 26 and December 2, 1993, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

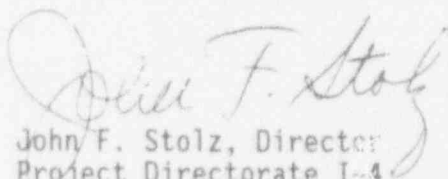
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.c.(2) of Facility Operating License No. DPR-50 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 182, are hereby incorporated in the license. GPU Nuclear Corporation shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, Director  
Project Directorate I-4  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: February 10, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 182

FACILITY OPERATING LICENSE NO. DPR-50

DOCKET NO. 50-289

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change.

Remove

ii  
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3-105  
3-106  
4-7a

Insert

ii  
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3.5.6 Deleted

### 3.14 FLOOD

#### 3.14.1 PERIODIC INSPECTION OF THE DIKES AROUND TMI

##### Applicability

Applies to inspection of the dikes surrounding the site.

##### Objective

To specify the minimum frequency for inspection of the dikes and to define the flood stage after which the dikes will be inspected.

##### Specification

- 3.14.1.1 The dikes shall be inspected at least once every six months and after the river has returned to normal, following the condition defined below:
- a. The level of the Susquehanna River exceeds flood stage; flood stage is defined as elevation 307 feet at the Susquehanna River Gage at Harrisburg.

##### Bases

The earth dikes are compacted to provide a stable impervious embankment that protects the site from inundation during the design flood of 1,100,000 cfs. The rip-rap, provided to protect the dikes from wave action and the flow of the river, continues downward into natural ground for a minimum depth of two feet to prevent undermining of the dike (References 1 and 2).

Periodic inspection, and inspection of the dikes and rip-rap after the river has returned to normal from flood stage, will assure proper maintenance of the dikes, thus assuring protection of the site during the design flood.

##### References

- (1) UFSAR, Section 2.6.5 - "Design of Hydraulic Facilities"
- (2) UFSAR, Figure 2.6-17 - "Typical Dike Section"

TABLE 3.21-2  
(Continued)

TABLE NOTATION

- \* At all times.
- \*\* During waste gas holdup system operation.
- \*\*\* Operability is not required when discharges are positively controlled through the closure of WDG-V47 and where RM-A8 (or RM-A4 and RM-A6), FT-149, and FT-150 are operable.
- \*\*\*\* During Fuel Handling Building ESF Air Treatment System Operation.
- # At all times during containment purging.
- ## At all times when condenser vacuum is established.

ACTION 25 With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, the contents of the tank may be released to the environment provided that prior to initiating the release:

1. At least two independent samples of the tank's contents are analyzed in accordance with Table 4.22-2, Item A, and
2. At least two technically qualified members of the Unit staff independently verify the release rate calculations and verify the discharge valve lineup.
3. The Operations & Maintenance Director, Unit 1, shall approve each release.

Otherwise, suspend release of radioactive effluent via this pathway.

ACTION 26 With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, effluent releases via this pathway may continue provided the flow rate is estimated at least once per 4 hours.

ACTION 27 With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, effluent releases via this pathway may continue provided grab samples are taken at least once per 12 hours and the initial samples are analyzed for gross activity (gamma scan) within 24 hours after the channel has been declared inoperable. If RM-A9 is declared inoperable, see also Specification 3.5.1, Table 3-5.1, Item C.3.f.

- ACTION 30
1. With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, a grab sample shall be collected and analyzed for the inoperable gas channel(s) at least once per 24 hours. With both channels inoperable, a grab sample shall be collected and analyzed for the inoperable gas channel(s):
    - (a) at least once per 4 hours during degassing operations.
    - (b) at least once per 24 hours during other operations (e.g. Feed and Bleed).

### 3.22 RADIOACTIVE EFFLUENT

#### 3.22.1 LIQUID EFFLUENT

##### 3.22.1.1 CONCENTRATION

###### LIMITING CONDITION FOR OPERATION

3.22.1.1 The concentration of radioactive material released at anytime from the unit to unrestricted areas (see Figure 5-3) shall be limited to ten times the concentrations specified in 10 CFR Part 20.1001-20.2401, Appendix B, Table 2, Column 2 for radionuclides other than dissolved or entrained noble gases. For dissolved or entrained noble gases, the concentration shall be limited to  $3 \times 10^{-3}$  uCi/cc total activity.

APPLICABILITY: At all times

###### ACTION:

With the concentration of radioactive material released from the unit to unrestricted areas exceeding the above limits, immediately restore concentration within the above limits.

###### BASES

This specification is provided to ensure that the concentration of radioactive materials released in liquid waste effluent from the unit to unrestricted areas will be less than ten times the concentration levels specified in 10 CFR Part 20.1001-20.2401, Appendix B, Table 2. This limitation provides additional assurance that the levels of radioactive materials in bodies of water outside the site will not result in exposures with (1) the Section II.A design objectives of Appendix I, 10 CFR Part 50, to a MEMBER OF THE PUBLIC and (2) the limits of 10 CFR Part 20.1301 to the population. The concentration limit for noble gases is based upon the assumption the Xe-135 is the controlling radioisotope and its MPC in air (submersion) was converted to an equivalent concentration in water using the methods described in International Commission on Radiological Protection (ICRP) Publication 2.



Amendment No. 78, 108, 124, 138, 139, 147, 175, 182  
4-7a

TABLE 4.1-1 (Continued)

CHANNEL DESCRIPTION	CHECK	TEST	CALIBRATE	REMARKS
49. Saturation Margin Monitor	S(1)	M(1)	R	(1)When $T_{ave}$ is greater than 525°F.
50. Emergency Feedwater Flow Instrumentation	NA	M(1)	F	(1)When $T_{ave}$ is greater than 250°F.
51. Heat Sink Protection System				
a. EFW Auto Initiation Instrument Channels				(1)Includes logic test only.
1. Loss of Both Feedwater Pumps	NA	Q(1)	F	
2. Loss of All RC Pumps	NA	Q(1)	R	
3. Reactor Building Pressure	NA	Q	F	
4. OTSG Low Level	W	Q	R	
b. MFW Isolation OTSG Low Pressure	NA	Q	R	
c. EFW Control Valve Control System				
1. OTSG Level Loops	W	Q	R	
2. Controllers	W	NA	R	
d. HSPS Train Actuation Logic	NA	Q(1)	R	
52. Backup Incore Thermocouple Display	M(1)	NA	R	(1)When $T_{ave}$ is greater than 250°F.
53. Deleted				
54. RCS Inventory Trending System				
a. Level	NA	NA	F	
b. Void Fraction	W	NA	F	